Several ships encountered gales in the waters southwest of Ireland on the 1st. The British steamship *Jamaica Producer* recorded force 11. Thereafter conditions were less stormy until the 8th, when the high-pressure area over northwestern Europe showed increased strength and another strong anticyclone was nearing the lower Lakes in its southeastward movement toward the North Atlantic coast. Between these areas pressure was decidedly low south of Cape Farewell and rather low north of Bermuda. Several whole gales and a wind of force 11 were noted near mid-ocean on the 8th to 11th. The LOW from near Bermuda was by the 11th near the thirty-fifth meridian, while another LOW had begun to affect the west Gulf region.

On the 12th (chart IX) low-pressure centers were near the Atlantic coast of the United States and near and to southward of southern Greenland, while high pressure extended from Bermuda to Madeira and thence northeastward to Norway. Strong winds were noted this day in many parts of the ocean where the gradient was steep; one instance of force 11 was reported by the Dutch motorship *Tanimbar*, close to 42° N., 40° W.

Only a few gales were recorded on the 14th and 15th, but on the 16th the British motorship *Irisbank* noted force 11 east-northeast of Bermuda.

Chart X shows the conditions of the 18th, when decidedly low pressure extended from Newfoundland eastward to within 400 miles of Ireland. Several instances of forces 9 to 11 were noted on or about this day, and the single instance of hurricane force (12) was recorded during the afternoon of the 17th, by the American steamship *Quaker City* which also reported the lowest pressure of the month, as noted above.

After the 19th few gales of importance occurred east of the fortieth meridian and except during the 4-day period, 24th to 27th, not many elsewhere. Decidedly low pressure was persistent during the latter period in the general region of Nova Scotia and Newfoundland, causing strong winds, almost invariably from a southerly or westerly point, along the chief routes, mainly between the sixty-fifth and forty-fifth meridians. The French liner *Paris* recorded force 11 from the west at an early hour of the 25th, near 42° N., 51° W.

About the 8th and 9th, when pressure was notably high near Bermuda and Hatteras, there were several reports of gales from a northwesterly or northerly direction, by vessels near the thirtieth parallel of latitude, between the Florida coast and the fifty-fifth meridian. The American steamship *Solana* noted force 10 in this region.

Trade winds of much greater force than usual were noted in the Caribbean Sea on the 2d and 12th.

Fog.—There was more fog than there had been during February in some areas near the Gulf and Atlantic coasts of the United States, in parts of the Grand Banks region, and especially in and near the English Channel. In this last-named region fog was decidedly more prevalent than usual in March, as it was likewise near Delaware and Chesapeake Bays, and in the northwestern Gulf of Mexico.

In other North Atlantic regions the fog situation was not far from normal, save from the waters adjacent to New England eastward nearly to the Grand Banks, where there was less fog than would be expected.

The chief period of fog in waters bordering on England and northwestern France was the 18th to 21st; also the English Channel had considerable from the 26th to 29th. The Grand Banks region noted widespread fog about the 3d and for a period of fully a week near the middle of the month. The 5° square from 40° to 45° N., 45° to 50° W., reported fog altogether on nine different days of the month.

Over the waters adjacent to Nova Scotia and New England there were scattered occurrences of fog during the first week and about the 12th. Near Delaware and Chesapeake Bays fog occurred chiefly about the 6th, 12th, 20th, and 31st, and in the square 35° to 40° N., 70° to 75° W., there were 9 days during March on which fog was noted.

From Cape Hatteras to southern Florida and in the northeastern Gulf of Mexico fog was very seldom met, but it was quite otherwise in the northwestern part of the Gulf. The waters in the square 25° to 30° N., 90° to 95° W., experienced fog from the 6th to 9th, and again from the 21st to 23d, 7 days altogether.

OCEAN GALES AND STORMS, MARCH 1935

Vessel	Voyage		Postition at time of lowest barometer		Gale began March —	Time of lowest barometer March —	Gale ended March —	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN			° ′	° ′				*Inches*					
City of Hamburg, Am. S. S.	Norfolk	London	49 12 N.	20 57 W.	1	4a, 1	1	29.30	SW	SW, 8	WNW	W, 9	SW-W.
Jamaica Producer, Br. S. S.	Kingston	Rotterdam	48 50 N.	16 00 W.	[1] 26	8a, 1	1	29.33	WNW	W, 8	NW	WNW, 11	W-NNW.
Mercier, Belg. S. S.	Antwerp	New York	49 46 N.	13 08 W.	1	9a, 1	1	29.32	WSW	WSW, 8	WNW	WNW, 10	W-WSW-WNW.
General Gassouin, Fr. M. S.	New York	Antwerp	49 26 N.	10 04 W.	1	10a, 1	2	29.06	W	W, 8	NW	W, 9	W-NW.
Bodegraven, Du. S. S.	Cristobal	Liverpool	11 26 N.	74 50 W.	1	4p, 2	6	29.71	NE	NE, 8	E	NE, 8	None.
Leerdam, Du. S. S.	Chester, Pa.	Rotterdam	39 32 N.	68 32 W.	3	8a, 3	5	30.04	NNW	SW, 4	N	NW, 10	SW-NW.
London Corporation, Br. S. S.	Halifax	Liverpool	43 00 N.	57 00 W.	4	3a, 4	6	29.51	S	W, 9	W	W, 10	S-W.
Frode, Dan. S. S.	Emmingham, Eng.	Halifax	44 49 N.	52 17 W.	4	9a, 4	5	29.29	W	W, 6	WNW	W, 10	WSW-W.
Maine, Dan. S. S.	New York	Copenhagen	55 30 N.	26 15 W.	5	Mdt, 5	7	29.62	SSE	S, 9	SSE	S, 10	
Sandown Castle, Br. S. S.	London	New York	49 15 N.	24 45 W.	6	3p, 6	6	29.60	S	SSW, 9	SW	S, 10	S-SSW-W.
Lustrous, Br. S. S.	Falmouth, Eng.	Port Arthur	42 10 N.	25 20 W.	6	4p, 6	6	29.68	SSE	SW, 6	W	S, 10	S-WSW.
Steelmaker, Am. S. S.	Cristobal	London	39 34 N.	36 05 W.	5	4a, 7	7	29.54	WSW	WSW, 8	W	NW, 9	SW-W.
Solana, Am. S. S.	New Orleans	New York	30 30 N.	79 15 W.	8	7a, 8	9	30.06	NE	W, 4	NE	NE, 10	W-NNW.
London Corporation, Br. S. S.	Halifax	Liverpool	49 28 N.	23 20 W.	8	8a, 9	10	29.47,	SE	SE, 11	SE	SE, 11	Steady.
Leerdam, Du. S. S.	Chester, Pa.	Rotterdam	48 32 N.	26 00 W.	8	10a, 9	10	29.16	S	SE, 9	SE	SE, 9	SSE-W-N.
Excelsior, Am. S. S.	Casablanca	New York	37 00 N.	41 56 W.	9	6a, 10	10	29.37	SSW	SW, 8	WNW	WNW, 9	SSW-W.

[1] February.

OCEAN GALES AND STORMS, MARCH 1935—Continued

Vessel	Voyage		Position at time of lowest barometer		Gale began March —	Time of lowest barometer March —	Gale ended March —	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN—Continued			° ′	° ′				*Inches*					
West Eldara, Am. S. S.	Newport News	Rotterdam	[1]46 56 N.	34 30 W.	11	2p, 10	11	28.94	S	S, 7	SW	S, 9	ENE-S.
Tanimbar, Du. M. S.	Gibraltar	Halifax	41 18 N.	33 59 W.	10	6a, 11	11	29.47	S	WSW, 10	W	WSW, 10	SW-W.
Sagaporack, Am. S. S.	Copenhagen	Portland, Maine.	56 00 N.	24 30 W.	11	2a, 12	12	29.32	SSE	SE, 10	S	SE, 10	SE-S-W.
Tillie Lykes, Am. S. S.	Puerto Colombia.	Santo Domingo.	11 39 N.	74 37 W.	11	4a, 12	13	29.78	ENE	NE, 7	E	ENE, 7	None.
Tetela, Br. S. S.	Pto. Cortez, Hond.	Rotterdam	44 50 N.	40 38 W.	12	10a, 12	12	29.30	SSE	SE, 8	N	NNE, 9	SSE-SE-WSW.
Tanimbar, Du. M. S.	Gibraltar	Halifax	41 44 N.	40 18 W.	12	Noon, 12	12	29.60	S	WSW, 9	NNW	SW, 11	SW-W.
Barbara, Am. S. S.	San Juan	Philadelphia	34 02 N.	73 40 W.	12	2a, 13	13	29.61	SW	SW, 9	NW	SW, 9	SW-NW.
General Gassouin, Fr. M. S.	Antwerp	New York	42 07 N.	26 15 W.	13	3p, 13	13	29.55	SW	WSW, 7	WSW	SW, 10	SW-WNW.
Black Falcon, Am. S. S.	do	do	49 35 N.	23 15 W.	15	5a, 15	16	29.08	WNW	SSW, 7	W	W, 9	SSW-W.
Irisbank, Br. M. S.	Gibraltar	Boston	35 30 N.	50 50 W.	15	4a, 16	16	29.86	SSW	NW, 10	NNW	NW, 11	WSW-NW.
Quaker City, Am. S. S.	Dundee	do	54 45 N.	27 08 W.	17	3p, 17	17	28.51	NE	N, 12	NW	N, 12	NE-N-NW.
Irisbank, Br. M. S.	Gibraltar	do	38 05 N.	61 50 W.	18	7a, 18	18	30.15	SW	SW, 11	NW	SW, 11	SW-NW.
Manhattan, Am. S. S.	Cobh	New York	45 12 N.	38 30 W.	18	9a, 18	19	29.53	NW	NW8,	WNW	W, 10	W-NW.
New York, Ger. S. S.	Cherbourg	do	47 00 N.	31 36 W.	19	10a, 18	22	29.21	SW	NNE, 4	WNW	W, 11	
Alkmaar, Du. S. S.	Amsterdam	Curacao	40 58 N.	21 25 W.	18	10p, 18	19	29.46	SW	WNW, 9	NW	NW, 10	SW-NW.
Stuttgart, Ger. S. S.	Galway	Halifax	48 00 N.	32 54 W.	20	10p, 19	21	[2]29.49	WSW	SW, 7	WSW	W, 10	
Scanstates, Am. S. S.	Copenhagen	New York	52 12 N.	35 06 W.	20	10a, 20	21	28.98	W	SW, 7	NW	NNW, 9	SW-W.
Brasilien, Dan. S. S.	Buenos Aires	Copenhagen	37 52 N.	12 46 W.	19	Noon, 20	20	[4]29.65	WSW	NW, 7	NW	WNW, 9	WNW-NW.
Caledonia, Br. S. S.	Glasgow	Halifax	44 56 N.	45 03 W.	21	3p, 21	22	29.15	SSE	WSW, 9	W	SSE, 9	SSE-WSW.
Quaker City, Am. S. S.	Dundee	Boston	45 37 N.	40 51 W.	21	6p, 21	22	29.27	S	S, 10	SW	SW, 10	S-WSW.
Boschdyk, Du. S. S.	Rotterdam	do	44 21 N.	40 08 W.	23	5a, 23	23	[3]29.14	S	SSE, 9	S	SSE, 9	SSE-WSW.
Waukegan, Am. S. S.	Havre	New York	37 13 N.	63 22 W.	23	2a, 24	24	29.61	SSW	SSW, 10	WNW	SSW, 10	SSW-SW.
Scoharie, Am. S. S.	Bremen	Savannah	44 10 N.	30 00 W.	22	4a, 24	24	29.64	SSW	S, 9	SW	S, 9	S-SW.
Campoamor, Span. M. S.	Bilboa	Philadelphia	38 40 N.	58 20 W.	24	3p, 24	25	[3]29.41	S	S, 3	W	SW, 10	S-SW-W.
Scanstates, Am. S. S.	Copenhagen	New York	43 00 N.	57 00 W.	24	Mdt, 24	25	28.78	W	W, 9	W	W, 9	S-W-WNW.
Paris, Fr. S. S.	Havre	do	41 30 N.	50 42 W.	25	3a, 25	25	29.35	SW	WSW, 8	WNW	W, 11	S-WSW-W.
Cheyenne, Br. M. S.	Belfast	Baytown, Tex.	32 15 N.	58 58 W.	26	10p, 26	27	29.50	SW	SW, 9	NW	SW, 10	SW-NW.
Yorkmoor, Br. S. S.	St. Vincent, Cape Verde Is.	Halifax	35 45 N.	51 40 W.	26	4a, 27	27	29.43	SW	SW, 8	W	WSW, 9	SW-WNW.
Pres. Harding, Am. S. S.	Cobh	New York	42 40 N.	44 35 W.	27	9a, 27	27	29.02	SW	S, 9	W	SW, 10	SW-S-SW.
Schoharie, Am. S. S.	Bremen	Savannah	38 40 N.	48 00 W.	26	3p, 27	27	29.54	SW	SW, 10	W	SW, 10	SW-N.
Pres. Harding, Am. S. S.	Cobh	New York	41 02 N.	63 40 W.	29	3p, 29	29	29.61	S	S, 8	NW	S, 9	S-WNW.
NORTH PACIFIC OCEAN													
Nordbo, Dan. M. S.	Osaka	Vancouver, B. C.	40 20 N.	163 40 E.	[1]28	4a, 1	1	29.51	SE	S, 8	SSW	SSE, 9	SSE-S-SSW.
Makawao, Am. S. S.	Port Allen, T.H.	San Francisco	34 31 N.	133 39 W.	28	do	1	29.74	WNW	NNW, 8	N	N, 9	NNW-N.
Athelchief, Br. M. S.	Yokohama	Los Angeles	43 15 N.	170 00 E.	1	3p, 1	1	29.39	SSE	SE, 9	S	SE, 9	SE-S.
General Sherman, Am. S. S.	Portland, Oreg.	Yokohama	47 42 N.	162 48 E.	1	6a, 2	2	28.96	SE	E, 3	WNW	SE, 9	SSE-E-NW.
Olympia, Am. S. S.	Yokohama	Vancouver, B. C.	49 18 N.	135 10 W.	1	6p, 3	3	29.46	W	N, 8	N	WNW, 10	W-N-NNE.
Makura, Br. S. S.	Papeete	San Francisco	8 35 N.	138 08 W.	3	4a, 4	4	29.66	E	ENE, 7	ENE	E, 9	E-ENE.
Aorangi, Br. M. S.	Victoria	Honolulu	25 30 N.	154 00 W.	4	6p, 4	4	29.87	S	S, 8	S	S, 9	SE-S.
Tamaha, Br. S. S.	Yokohama	Los Angeles	41 38 N.	168 45 E.	5	Noon, 5	5	29.09	ESE	SW, 7	SSW	ESE, 9	ESE-SW.
Pres. Hoover, Am. S. S.	Honolulu	Yokohama	34 24 N.	154 48 E.	7	10a, 6	7	29.43	NW	SW, 7	NW	NW, 9	SW-WNW.
Golden Horn, Am. S. S.	Dairen	San Francisco	[2]39 57 N.	150 32 E.	6	Mdt, 6	6	28.97	WNW	SW, 8	SW	SW, 9	WNW-SW.
Empress of Japan, Br. S. S.	Honolulu	Yokohama	29 38 N.	156 47 E.	7	8a, 7	7	29.66	W	W, 8	NW	WNW, 9	
Golden Dragon, Am. S. S.	Manila	San Francisco	38 27 N.	179 50 E.	7	1p, 7	7	29.45	S	S, 9	S	S, 9	None.
Hikawa Maru, Jap. M. S.	Vancouver, B. C.	Yokohama	51 04 N.	173 30 W.	7	10p, 7	8	28.38	SSW	SSW, 8	W	W, 9	SSE-SSW-S.
San Pedro Maru, Jap. M. S.	Yokohama	Los Angeles	[2]37 36 N.	163 54 E.	9	3a, 8	9	29.41	WSW	SW, 4	WNW	W, 9	SW-WSW.
Talthybius, Br. S. S.	do	Vancouver, B. C.	49 54 N.	139 12 W.	11	3p, 9	11	29.44	SE	S, 7	SE	SE, 9	S-W.
Golden Star, Am. S. S.	San Francisco	Yokohama	34 37 N.	141 50 E.	9	2p, 10	10	29.69	SW	W, 9	W	SW, 10	SW-W.
Grays Harbor, Am. S. S.	Tacoma	do	35 00 N.	153 06 E.	10	1a, 11	11	29.72	SSW	SSW, 9	W	SSW, 9	SSW-W.
Hikawa Maru, Jap. M. S.	Vancouver, B. C.	do	48 08 N.	164 08 E.	11	2p, 11	13	28.75	SW	S, 5	NW	WNW, 11	ESE-S-SW.
Oregon, Am. S. S.	Dairen	San Francisco	41 51 N.	155 00 E.	10	do	13	29.31	SSW	WNW, 9	WNW	WNW, 11	None.
Tercero, Nor. M. S.	do	Los Angeles	41 45 N.	176 00 W.	11	6p, 12	12	29.17	SW	SSW, 10	W	SSW, 10	SSW-W.
City of Vancouver, Br. S. S.	Muroran, Japan	Vancouver, B. C.	44 26 N.	151 41 E.	11	10a, 11	13	28.78	NW	W, 4	WNW	WNW, 10	SW-NW.
Hakonesan Maru, Jap. M. S.	Yokohama	Los Angeles	46 36 N.	173 00 W.	13	1a, 14	13	29.00	WSW	WSW, 7	S	S, 9	None.
Grays Harbor, Am. S. S.	Tacoma	Yokohama	34 55 N.	146 45 E.	13	1p, 13	13	29.70	WSW	W, 8	W	WSW, 10	WSW-NNW.
Pres. Jackson, Am. S. S.	Yokohama	Victoria, B.C.	48 00 N.	172 25 E.	11	10p, 13	13	28.83	W	SW, 6	SW	WNW, 10	SW-N.
Golden Horn, Am. S. S.	Dairen	San Francisco	47 30 N.	178 54 W.	13	Mdt, 13	14	29.14	WSW	WNW, 7	SW	WSW, 9	WSW-WNW.
Somerville, Nor. M. S.	Hong Kong	Los Angeles	41 49 N.	165 00 E.	13	6a, 14	14	29.10	SSW	SSW, 9	W	S, 10	S-SSW-W.
Atlantic City, Br. S. S.	San Diego	Balboa	[1]14 51 N.	94 33 W.	14	4p, 14	14	30.06	NE	N, 6	NNW	N, 8	N-NNW.
Hanover, Am. S. S.	Honolulu	Los Angeles	26 12 N.	146 05 W.	14	do	14	29.66	NNW	NNW, 9	NNE	NW, 10	NW-N.
Nojima Maru, Jap. M. S.	Yokohama	do	45 47 N.	179 26 E.	12	Mdt, 14	14	29.19	NW	SE, 6	W	NW, 10	S-SE-E.
Makua, Am. S. S.	Seattle	Kaanapali	28 54 N.	149 48 W.	14	5a, 15	15	30.01	NNE	NE, 9	NNE	NE, 9	N-NE-NNE.
Comeric, Br. S. S.	Milke	New Westminster.	40 27 N.	139 00 E.	17	Mdt, 16	17	29.73	NW	WNW, 7	W	NW, 8	
Atlantic City, Br. S. S.	San Diego	Balboa	9 27 N.	86 25 W.	16	6a, 17	19	29.93	NE	N, 2	N	NE, 7	
Empress of Asia, Br. S. S.	Vancouver, B. C.	Yokohama	46 08 N.	158 54 E.	17	2a, 18	18	28.60	S	WNW, 10	NW	NW, 11	SW-WNW-NW.
Pennsylvania, Am. S. S.	Otaru, Japan	San Francisco	47 40 N.	164 00 E.	17	7a, 18	18	28.71	S	WSW, 9	W	S, 10	SSW-W.
Pres. Jefferson, Am. S. S.	Victoria, B. C.	Yokohama	50 24 N.	131 22 W.	19	2p, 19	20	29.51	WNW	WNW, 8	NNW	NNW, 9	None.

[1] February. [2] Position approximate. [3] Barometer uncorrected.

OCEAN GALES AND STORMS, MARCH 1935—Continued

Vessel	Voyage		Position at time of lowest barometer		Gale began March —	Time of lowest barometer March —	Gale ended March —	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH PACIFIC OCEAN—Continued			° ′	° ′				*Inches*					
Niagara, Br. S. S.	Honolulu	Victoria, B. C.	43 09 N.	134 19 W.	18	3p, 20	20	30.03	E	NNW, 7	NNW	NW, 10	
Tyndareus, Br. S. S.	Yokohama	do	41 18 N.	152 14 E.	22	2a, 23	23	29.33	N	NNW, 10	NW	NNW, 10	NNE-NW.
Jefferson Myers, Am. S. S.	do	Los Angeles	41 42 N.	159 56 E.	22	8a, 23	23	29.30	E	SSE, 8	W	SW, 10	SSE-SW.
Comeric, Br. S. S.	Miike	New Westminster.	49 16 N.	167 22 E.	23	8p, 23	24	29.42	SE	SSW, 9	WSW	SW, 9	SE-S-SW.
Oregon, Am. S. S.	Dairen	San Francisco	43 06 N.	135 48 W.	23	3a, 24		29.80	WSW	WSW, 8		WSW, 9	WSW-W.
Nitro, U. S. N. Aux.	Pearl Harbor	Bremerton	[1]48 14 N.	125 40 W.	24	11p, 24	24	29.30	WNW	SW, 6	W	WNW, 9	
San Diego Maru, Jap. M. S.	Kobe	San Francisco	35 07 N.	148 00 E.	25	4p, 25	25	[2]28.92	SE	SW, 8	WSW	ESE, 9	ESE-SW-WSW.
Nichiyo Maru, Jap. M. S.	Yokohama	do	38 40 N.	147 20 E.	25	9a, 26	27	28.85	SE	SSW, 9	WSW	ESE, 9	SSW-SW.
Pres. Jefferson, Am. S. S.	Victoria, B. C.	Yokohama	45 54 N.	159 02 E.	26	Mdt, 27	27	29.04	ESE	E, 3	E	E, 9	E-NNE.
Steel Traveler, Am. S. S.	Los Angeles	Honolulu	27 28 N.	143 10 W.	28	4a, 28	28	29.85	WSW	SSE, 7	WSW	WSW, 9	SSE-WSW.
Meigs, U. S. A. Trans.	Manila	San Francisco	37 06 N.	138 00 W.	29	3a, 30	30	29.79	ESE	ESE, 8	ESE	ESE, 8	None.
SOUTH PACIFIC OCEAN													
Eclipse, Br. S. S.	Dunedin, N. Z.	Los Angeles	27 30 S.	169 15 W.	21	Mdt, 21	22	29.53	ESE	E, 8	SSE	ESE, 9	E-SSE.
Maunganui, Br. S. S.	Wellington	Rarotonga	26 57 S.	165 36 W.	22	8a, 22	22	28.90	ESE	SSE, 12	SSW	SSE, 12	ESE-SSE.

[1] Position approximate.

[2] Barometer uncorrected.

NORTH PACIFIC OCEAN, MARCH 1935

By WILLIS E. HURD

Atmospheric pressure.—The average atmospheric pressure over the North Pacific Ocean for March 1935 shows the center of the Aleutian LOW to have been over the Bering Sea, at a somewhat higher latitude than usual for the month. The pressure at the approximate center (29.74 at St. Paul Island) was close to normal. Along the Alaskan Peninsula and the Aleutians pressure was approximately 0.20 inch above the normal. This was due to two facts, viz, the unusual northward movement of many of the high-latitude centers of cyclonic action, and the passage of extensive high-pressure areas along the neighborhood of the forty-fifth to fifty-fifth parallels. The lowest recorded pressure of the month was 28.38 inches, observed at St. Paul on the 14th, and on the 7th near 51° N., 173° W., as reported by the Japanese M. S. *Hikawa Maru.* In the Aleutians the highest pressure was 30.68 inches at Dutch Harbor on the 18th.

TABLE 1.—*Averages, departures, and extremes of atmospheric pressure at sea level, North Pacific Ocean, March 1935, at selected stations*

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	Inches	*Inch*	*Inches*		*Inches*	
Point Barrow	30.25	+0.10	30.94	26	29.72	10, 17
Dutch Harbor	29.88	+.18	30.68	18	28.78	8
St. Paul	29.74	+.01	30.50	18	28.38	14
Kodiak	29.92	+.23	30.46	19	29.08	9
Juneau	29.89	−.05	30.47	29	28.96	23
Tatoosh Island	29.92	−.04	30.37	15	29.20	24
San Francisco	30.06	.00	30.39	11	29.67	6
Mazatlan	29.92	.00	30.00	14	29.84	26, 27
Honolulu	29.98	−.06	30.14	13	29.79	18
Midway Island	30.07	.00	30.26	17	29.82	9
Guam	29.85	−.05	29.94	14, 16	29.76	4
Manila	29.87	+.01	29.94	6, 9	29.80	2, 3
Hong Kong	29.94		30.08	6	29.70	27
Naha	30.01	+.01	30.16	5, 6	29.68	27
Chichishima	30.00	.00	30.24	15	29.84	2, 3, 28, 31
Nemuro	29.85		30.46	23	29.18	25

NOTE.—Data based on 1 daily observation only, except those for Juneau, Tatoosh Island, San Francisco, and Honolulu, which are based on 2 observations. Departures are computed from best available normals related to time of observation.

A secondary LOW in the average pressure situation over the northeastern part of the Pacific reflected the frequent cyclonic action of the month to southeastward of the Alaskan Peninsula.

In middle latitudes pressure was practically normal and moderately high along the entire width of the ocean.

In lower latitudes pressure was normal or nearly so at the extreme eastern and western stations, as typified by Manila and Mazatlan, but was below normal at Guam and Honolulu.

Cyclones and gales.—March 1935 cannot be characterized as an intensely stormy month on the North Pacific, yet gales were frequent along the western part of the northern steamship routes, particularly between the central Aleutians and the Japanese islands of Honshu and Hokushu. In some localities east of the Kurile Islands winds of force 8 to 10 occurred about 1 day in 4. Gales of force 11 have been reported on 4 dates only—the 11th, 12th, 18th, and 28th.

Over northern mid-ocean, gales were less intense and much less frequent than to the westward, and from higher latitudes between 150° and 160° W. no winds of gale force have been reported. East of 150° W. there were two regions of some storminess: One north of the fortieth parallel, between 140° W. and the American coast; the other about midway between the easternmost Hawaiian Islands and the California coast.

The Tropics were generally quiet, except for a few isolated gales.

Three extra-tropical cyclones of some importance originated in the Far East. The first crossed northern Japan on the 4th and entered the Bering Sea by way of the central Aleutians on the 8th. This storm spread greatly in area after passing to sea and was productive of fresh to strong gales over a considerable extent of ocean. On the 7th, 8th, and 9th, while the cyclone was central over extreme northern waters, the gale field gave scattered high wind velocities from the Aleutians southward and southwestward as far as the thirty-fifth to thirtieth parallels. The lowest pressure of the month reported on shipboard, 28.38 inches, occurred in connection with this storm late on the 7th, just south of Atka Island, in the central Aleutians.

The second cyclone of note appeared central over Hokushu and the southern Kuriles on the 9th and 10th. Gales of force 10 occurred in connection with it as far